

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 02177.0001P2	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. PCT/US2005/031563	International filing date ( <i>day/month/year</i> ) 03 September 2005 (03.09.2005)	Priority date ( <i>day/month/year</i> )	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant BYOCOAT ENTERPRISES, INC.			

- This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
- This REPORT consists of a total of 4 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

- This report contains indications relating to the following items:

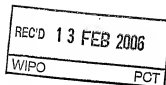
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report   |
| <input type="checkbox"/> Box No. II           | Priority  |
| <input type="checkbox"/> Box No. III          | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/> Box No. IV           | Lack of unity of invention  |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI           | Certain documents cited   |
| <input type="checkbox"/> Box No. VII          | Certain defects in the international application  |
| <input type="checkbox"/> Box No. VIII         | Certain observations on the international application   |

- The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland		Date of issuance of this report 04 March 2008 (04.03.2008)
Facsimile No. +41 22 338 82 70		Authorized officer  Simin Baharlow
Form PCT/IB/373 (January 2004)		e-mail: pt09.pct@wipo.int

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY



To:  
DAVID G. PERRYMAN  
NEEDLE & ROSENBERG, P.C.  
SUITE 1000  
999 PEACHTREE STREET  
ATLANTA, GA 30309-3915

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference <b>02177.0001P2</b>		Date of mailing (day/month/year) <b>08 FEB 2006</b>
International application No. <b>PCT/US05/31563</b>		FOR FURTHER ACTION See paragraph 2 below
International filing date (day/month/year) <b>03 September 2005 (03.09.2005)</b>	Priority date (day/month/year) <b>05 March 2004 (05.03.2004)</b>	
International Patent Classification (IPC) or both national classification and IPC <b>IPC(7): A23B 4/24 and US Cl.: 426/331,335, 532</b>		
Applicant <b>BYOCOAT ENTERPRISES, INC.</b>		

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion <b>30 January 2006 (30.01.2006)</b>	Authorized officer Helen F. Pratt Telephone No. 571-272-1201
--	---	--

Form PCT/ISA/237 (cover sheet) (April 2005)

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US05/31563

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed  
☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper  
☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed.  
☐ filed together with the international application in electronic form.  
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US05/31563

**Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims 1-38	YES
	Claims NONE	NO
Inventive step (IS)	Claims NONE	YES
	Claims 1-38	NO
Industrial applicability (IA)	Claims 1-38	YES
	Claims NONE	NO

**2. Citations and explanations:**

Claims 1-38 lack an inventive step under PCT Article 33(3) as being obvious over Compadre et al.(5,855,940) in view of Schneider et al. (6,749,804) and Latin (5,366,983) and Seabrook, Jr. et al. (5,906,825).

Compadre et al. disclose a composition containing quaternary ammonium compounds (cetylpyridinium chloride, claims 2 and 4) and water and method of admixing (abstract and col. 14, lines 39-40). Claims 1-5 differ from the reference in the particular amounts of the ingredients and trichloromelamine (TCM). However, Schneider discloses the use of TCM in connection with sanitizing animal habitats (abstract). The particular amounts of ingredients are within the skill of the ordinary worker absent a showing of unexpected results. Latin et al. disclose the use of cetylpyridinium chloride for removing bacteria from poultry (abstract). Seabrook, Jr. et al. disclose the use of antimicrobial agents such as quaternary ammonium salts in connection with TCM (col. 7, lines 45-50). It would have been within the skill of the ordinary worker to use only two of the listed components at a time as they are used for their known function. Therefore, it would have been obvious to use the TCM with the other claimed ingredients in the composition of Compadre et al.

The limitations of 6-19 have been discussed above and are obvious for those reasons.

Claim 20 further requires treating a surface, claim 21, using an effective amount and claim 21, treating poultry with the claimed composition. Compadre et al. disclose treating poultry (fig. 10). The further ingredients have been disclosed by the combined references. Therefore, it would have been obvious to treat poultry and surfaces as claimed.

Claim 22 further requires treating particular microorganisms such as Salmonella and E coli. The reference discloses treating many of those claimed (col. 14, lines 25-34). Using an effective amount is seen as being within the skill of the ordinary worker as in claim 23. Therefore, it would have been obvious to treat microorganisms using particular amounts as disclosed by the combined references.

The further limitations of claims 24-26, 32-38 have been disclosed above and are obvious for those reasons.

Claim 28 further requires spraying the composition onto poultry, claim 28 electrostatic coating, claim 29, contacting at the washing stage, claim 30, contacting at the chiller stage. Compadre et al. disclose spraying quaternary ammonium compounds onto the poultry and meat (abstract). Nothing new is seen in the use of electrostatic coating absent a showing that it produces unobvious results. Therefore, it would have been obvious to spray coat the claimed composition onto poultry and meat.

Claims 1-38 the criteria set out in PCT Article 33(2) because the prior art does not teach or fairly suggest the claimed compounds all in one reference.

Claims 1-38 meet the criteria set out in PCT Article 33(4), and thus meets the requirements for industrial applicability because the subject matter claimed can be made or used in industry.